

## § 111.60-4

(c) Cable for special applications defined in section 24 of IEEE 45-2002 must meet the provisions of that section.

[USCG-2003-16630, 73 FR 65198, Oct. 31, 2008, as amended by USCG-2013-0671, 78 FR 60153, Sept. 30, 2013]

### § 111.60-4 Minimum cable conductor size.

Each cable conductor must be #18 AWG (0.82 mm<sup>2</sup>) or larger except—

(a) Each power and lighting cable conductor must be #14 AWG (2.10 mm<sup>2</sup>) or larger; and

(b) Each thermocouple, pyrometer, or instrumentation cable conductor must be #22 AWG (0.33 mm<sup>2</sup>) or larger.

[CGD 94-108, 61 FR 28280, June 4, 1996]

### § 111.60-5 Cable installation.

(a) Each cable installation must meet—

(1) Sections 25, except 25.11, of IEEE 45-2002 (incorporated by reference; see 46 CFR 110.10-1); or

(2) Cables manufactured to IEC 60092-353 must be installed in accordance with IEC 60092-352 (both incorporated by reference; see 46 CFR 110.10-1), including clause 8.

(b) Each cable installation made in accordance with clause 8 of IEC 60092-352 must utilize the conductor ampacity values of Table I of IEC 60092-352.

### § 111.60-7 Demand loads.

Generator, feeder, and bus-tie cables must be selected on the basis of a computed load of not less than the demand load given in Table 111.60-7.

TABLE 111.60-7—DEMAND LOADS

Type of circuit	Demand load
Generator cables .....	115 percent of continuous generator rating.
Switchboard bus-tie, except ship's service to emergency switchboard bus-tie.	75 percent of generating capacity of the larger switchboard.
Emergency switchboard bus-tie .....	115 percent of continuous rating of emergency generator.
Motor feeders .....	Article 430, NFPA NEC 2002 (incorporated by reference; see 46 CFR 110.10-1).
Galley equipment feeder .....	100 percent of either the first 50 KW or one-half the connected load, whichever is the larger, plus 65 percent of the remaining connected load, plus 50 percent of the rating of the spare switches or circuit breakers on the distribution panel.
Lighting feeder .....	100 percent of the connected load plus the average active circuit load for the spare switches or circuit breakers on the distribution panels.

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(c) No cable may be located in any tank unless—

(1) The purpose of the cable is to supply equipment or instruments especially designed for and compatible with service in the tank and whose function requires the installation of the cable in the tank;

(2) The cable is either compatible with the liquid or gas in the tank or protected by an enclosure; and

(3) Neither braided cable armor nor cable metallic sheath is used as the grounding conductor.

(d) Braided cable armor or cable metallic sheath must not be used as the grounding conductor.

[CGD 74-125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94-108, 61 FR 28280, June 4, 1996; USCG-2003-16630, 73 FR 65198, Oct. 31, 2008; USCG-2013-0671, 78 FR 60153, Sept. 30, 2013]

### § 111.60-6 Fiber optic cable.

Each fiber optic cable must—

(a) Be constructed to pass the flammability test contained in IEEE 1202, test VW-1 of UL 1581, or Category A of IEC 60332-3-22 (all three standards incorporated by reference; see 46 CFR 110.10-1); or

(b) Be installed in accordance with § 111.60-2.

[CGD 94-108, 61 FR 28280, June 4, 1996, as amended by USCG-2003-16630, 73 FR 65198, Oct. 31, 2008]